



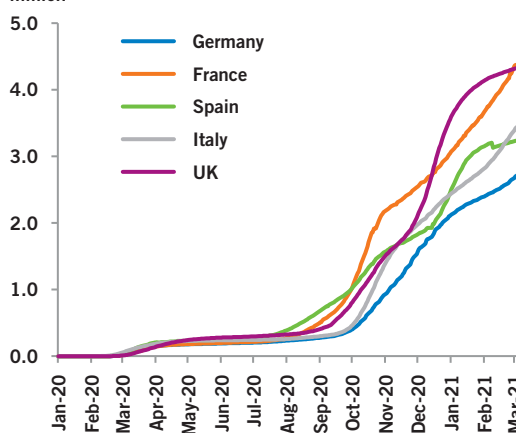
## MARKET SPOTLIGHT

### History repeating itself for PGM demand? Covid continues to hit EU auto sales

This time last year, we first reported on the mine shutdowns in South Africa, news of carmakers suspending production and plummeting car sales across the world. Twelve months on, the demand outlook remains fragile while the supply shock has all but normalised. Western Europe's car market accounted for 1 moz of platinum, 1.6 moz of palladium and 290 koz of rhodium in 2019.

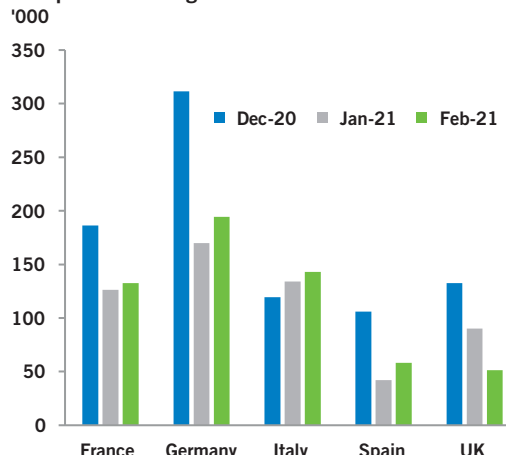
Registrations of new passenger cars in Western Europe declined by 30% in the first two months of 2021, compared to December 2020 (source: ACEA, SMMT), as Covid restrictions continue to weigh heavily on demand. So far this year, demand has fallen in most major markets compared to the end of 2020: Spain (-53%), UK (-47%) Germany (-42%) and France (-30%). Italy is the only market to record month-on-month improvements in 2021 (+16%). More than a year after the coronavirus outbreak was declared and most of Europe entered a lockdown, the region is dealing with another surge in cases. There could be a further reduction in sales if dealerships are once again forced to close.

Covid-19 total cases  
million



Source: Bloomberg

Europe new car registrations  
'000



Source: ACEA, SMMT

The sales forecast for 2021 has already been lowered by 100,000 units since the start of the year (source: LMC Automotive) owing to weak demand and ongoing restrictions. The slow roll-out of vaccines is also anticipated to protract the region's recovery. Carmakers face further potential setbacks from the semiconductor shortage, which is forecast to cut European light-vehicle production by 150,000 units in Q1'21 and by a further 60,000 units in Q2. Automakers cut their semiconductor chip orders in line with pandemic-weakened vehicle sales last year but were then caught out as automotive orders rebounded. Supplies have been further reduced by the recent power failures in Texas which halted production at three major chip plants, and a major fire at one of Renesas's factories in Japan. Car production levels are expected to normalise and lost volume should be recovered by the second half of the year by keeping production facilities open through traditional summer shutdowns, but any further delay to chip supply beyond Q3 is likely to impact full-year sales figures. **A further drop in demand from falling car production and sales in Europe, this time without reduced mine supply to offset it, risks pushing the platinum market into greater surplus (ex. investment) in 2021 and dampening the rate of increase of metal prices.**



# PRECIOUS METALS REVIEW

## 79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,732	-0.57%	1,746	25/03/2021	1,722	26/03/2021
€/oz	1,468	0.34%	1,478	25/03/2021	1,451	22/03/2021

**Swiss gold exports to Asia are gaining momentum.** Last month, shipments of gold to India and Thailand rose to multi-year highs, confirming expectations that demand in Asia, particularly India, is picking up. Customs data showed that Switzerland exported 57.9 tonnes of gold to India, 11.2 tonnes to Thailand (a regional trade hub), 2 tonnes to mainland China and 0.3 tonnes to Hong Kong.

Switzerland is the world's largest gold refining centre, processing the equivalent of a third of global supply. Although bond yields fell, the dollar strengthened last week which may have dragged the gold price down. The consolidation of last year's gains looks set to continue for a while longer.

## 47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	25.03	-4.65%	25.83	22/03/2021	24.41	25/03/2021
€/oz	21.22	-3.77%	21.64	22/03/2021	20.68	25/03/2021

**The outlook for PV in the US is bright with a Biden administration.** The president's commitment to dramatically accelerate wind and solar deployment in the US is expected to be a key driver of silver demand in photovoltaics (PV). An extended investment tax credit schedule and a large project pipeline are anticipated to boost utility-scale installations to 20 GW this year (source: IHS Markit). Congress extended the 26% tax credit for residential and commercial solar projects for two years in December 2020 as part of a \$2.3 trillion spending and coronavirus relief bill, although the solar industry is lobbying for a further extension of ~10 years. The current extension is expected to drive greater

adoption out to 2025 and has led to a 17% increase in deployment in the Solar Energy Industries Association's 2021-2025 forecast. The US is the second-largest PV market behind China, installing 19.2 GW of capacity last year. Silver demand from the PV industry is forecast to increase to 105 moz this year, from an estimated 88 moz in 2020 (source: The Silver Institute).

Silver has resumed its underperformance of gold as both metals' prices slipped lower last week. The price is trading sideways and will need to break above \$30/oz or below \$22/oz to confirm a change of trend.

## 78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,178	-1.78%	1,196	23/03/2021	1,145	25/03/2021
€/oz	998	-0.86%	1,006	24/03/2021	971	25/03/2021

**Refinery rationalisation could cut petroleum industry demand for platinum.** According to the IEA's latest Oil Market Report, refinery shutdowns equating to 3.6 million barrels per day have already been announced in an effort to reduce excess capacity, but a total of at least 6 million barrels per day will be required to allow utilisation rates to return to above 80%. Petroleum platinum demand contracted by more than half to less than 100 koz last year but is expected to rebound strongly in 2021.

However, a significant number of refinery closures could hinder the projected near-term recovery in demand this year and weaken requirements thereafter by returning recovered metal to market from recycled catalysts. The platinum price is in a period of consolidation following its sharp rally and could trade sideways to lower for a while yet. As gold trades sideways, platinum is holding investor's interest and global ETF holdings are steadily increasing.



# PRECIOUS METALS REVIEW

## <sup>46</sup> Pd **Palladium**

	Close	Weekly change	High	Date	Low	Date
\$/oz	2,676	1.30%	2,687	26/03/2021	2,563	22/03/2021
€/oz	2,269	2.34%	2,277	26/03/2021	2,156	22/03/2021

**Aligning catalyst loadings to the PGM supply profile is a priority for manufacturers.** With the substantial and prolonged price differential between palladium and platinum over the last few years, and the sustained deficit market forecast for palladium, there is a growing urgency to substitute some platinum for palladium in three-way catalysts (TWCs) for gasoline vehicles. Last year, Sibanye-Stillwater (SSW) announced it was collaborating with Impala Platinum to fund R&D into a catalyst which can partially substitute palladium for platinum in gasoline light-duty vehicles. SSW estimates over 1 moz of substitution by 2025. This was confirmed by a spokesperson for BASF at an industry gathering last week, who noted that the tri-metal catalyst is starting to

gain recognition. The new catalyst is well-suited to OEMs with large SUV and pick-up truck portfolios (mainly the US market), which stand to benefit from the substitution owing to these vehicles' high volume of PGMs.

The initial level of substitution is included in near-term market balance projections. However, 1 moz of substitution by 2025 would result in more than a 10% increase in platinum demand and could potentially switch the palladium market into surplus and the platinum market into deficit. The platinum price would likely outperform palladium. This year, the palladium price is expected to remain elevated while supply is disrupted.

## <sup>45</sup> Rh <sup>44</sup> Ru <sup>77</sup> Ir **Rhodium, Ruthenium, Iridium**

	Rhodium	Ruthenium	Iridium
Reporting week	\$27,400/oz	\$435/oz	\$6,350/oz
Previous week	\$30,700/oz	\$435/oz	\$6,600/oz

**Projects in South Africa will start production in the next couple of years.** Mothballed mines with existing infrastructure require less capital and are quicker to start up. Hence, initial modest output from Sibanye-Stillwater's K4 project could happen in 12 months. Production will be from both the Merensky and the UG2 Reefs, which brings more of the smaller PGMs along with platinum and palladium. ARM and Impala's Two Rivers expansion is a Merensky Reef project that is added to an existing UG2 Reef mine. First production from the Merensky Reef is planned in two years.

The exact metal ratios differ slightly for each mine and orebody. The UG2 Reef has around 9% rhodium, 14-15%

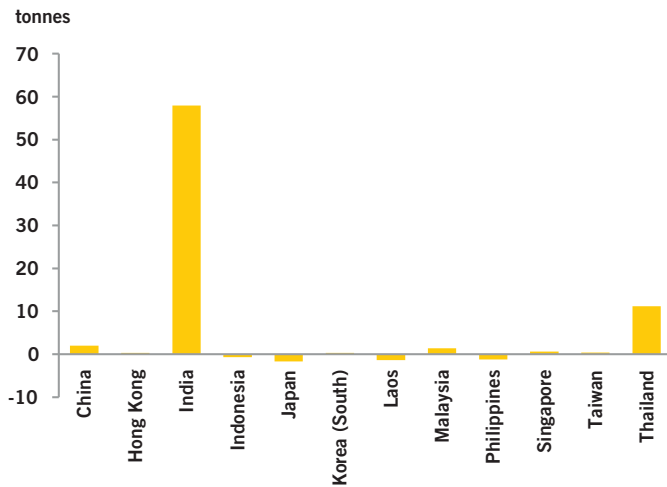
ruthenium and 3-4% iridium as a proportion of the five PGMs, plus gold (6E). In comparison, the Merensky Reef is richer in platinum and has around 3% rhodium, 6% ruthenium and 1% iridium as a proportion of 6E production. Boosted by high rhodium prices this year, the margin of mining UG2 ore is high. The current revenue from UG2 orebodies is around \$141/4E g (up from 2020 average of \$82/4E g), compared to a cost of around \$36/4E g.

After hitting a new high last Monday the rhodium price has pulled back slightly, as has the iridium price, but ruthenium held steady.



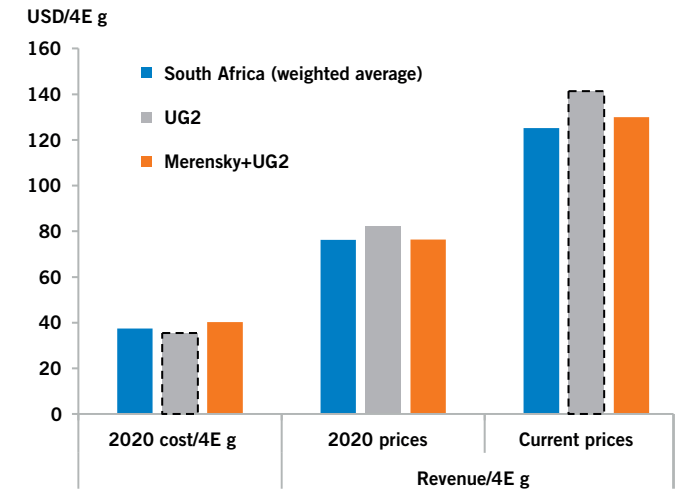
# TRENDS AND INVESTMENTS

## Swiss net gold exports (Asia)



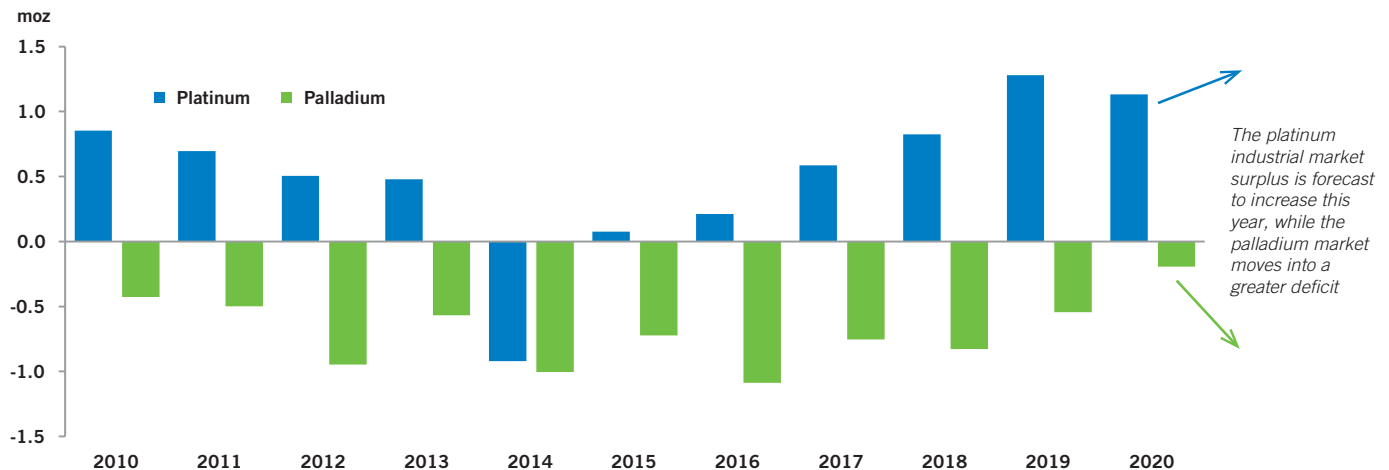
Source: SFA (Oxford), Swiss Federal Customs Administration

## Mining revenue vs. costs



Source: SFA (Oxford)

## PGM market balance



Source: SFA (Oxford). Note: excluding investment products

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